

after discharge, a questionnaire regarding return to work (RTW) was sent. We calculated area under the ROC curve.

**Results.**— In 589 patients with a full data set 2 years after rehabilitation (no missing values), the area under the ROC curve was 0.765 (95% CI: 0.72–0.81) with the simplest model with only 10 variables.

**Discussion.**— This result of a validation analysis of a priori defined prediction tool shows that RTW can be quite well predicted with five questions plus the INTERMED social subscore. All these variables were readily available at admission. We conclude that this model is a useful tool in order to predict return to work after orthopaedic trauma. This tool may help to correctly allocate patients and resources to adapted therapeutic programs at the beginning of vocational rehabilitation, i.e. a standard vocational program for patients with high probability to RTW or a more tailored program for other patients.

#### References

- [1] Deriaz O, et al. Abstract book 2011. 26<sup>e</sup> congrès de la SOFMER, p. 202.
- [2] Luthi F, et al. Abstract book 2011. 26<sup>e</sup> congrès de la SOFMER, p. 203.

<http://dx.doi.org/10.1016/j.rehab.2012.07.161>

CO14-005-e

### Tendinitis of the rotator cuff in Beninese teachers

G.T. Kpadonou<sup>a,\*</sup>, E. Alagnidé<sup>a</sup>, S. Gbénou<sup>b</sup>, D. Niama<sup>a</sup>, G. Hounghedji<sup>a</sup>, E. Aïbatin<sup>a</sup>

<sup>a</sup> Service de rééducation et de réadaptation fonctionnelle du CNHU, 04 BP 808 Cadjèhoun, Cotonou, Benin

<sup>b</sup> Hôpital de la mère et de l'enfant de la Lagune (Homel) de Cotonou, Benin

\*Corresponding author.

E-mail address: [kpaddonou\\_toussaint@yahoo.fr](mailto:kpaddonou_toussaint@yahoo.fr).

**Keywords:** Tendinitis; Rotator cuff; Primary school teachers; Benin

**Background.**— Tendinitis of the rotator cuff of the shoulder (TRCS) is a common disease that compromises in its evolution the use of the thoracic limb. Among the predisposing factors, overuse of the shoulder in sports and professional activities is crucial [1,2].

**Objective.**— To investigate the prevalence and treatment of TRCS in Beninese teachers.

**Method.**— Study cross-sectional aimed to be descriptive and analytic based on 345 primary school teachers in Cotonou, conducted from 10th May to 15th December 2010.

**Results.**— The average age of teachers was 38.17 years ranging from 25 to 55 years; 60.80% of teachers were male and 39.20% female with a sex ratio of 1.55. The prevalence of TRCS among teachers was 59.7%. Size of the teacher, seniority in the profession, distance ground edge and the width of the table, and the average daily hours spent writing on the board have significantly influenced the prevalence of TRCS in Beninese teachers ( $P = 0.0000$ ). Diabetes and a history of trauma to the shoulder did not influence the prevalence of TRCS. Only 27, 20% of teachers have benefited from treatment with 15% for modern medicine, 0.5% traditional medicine 4.70% for Chinese medicine and 7% for combined treatment.

**Conclusion.**— Importance of the prevalence of TRCS in this profession requires taking preventive measures by influencing risk factors of occurrence of TRCS and patient education toward teachers.

#### References

- [1] Alexopoulos C, Burdorf A, Kalokerinou A. Risk factors for musculoskeletal disorders among nursing personnel in Greek hospitals. *Int Arch Occup Health* 2003;76(4):289–94.
- [2] Vanderwindt D, Thomas E, Pope DP, Dewinter AF, et al. Occupational risk factors for shoulder pain: a systematic review. *Occup Environ Med* 2000;57:433–42.

<http://dx.doi.org/10.1016/j.rehab.2012.07.162>

CO14-006-e

### URAM scale for disability assessment in Dupuytren's disease: A comparative study of its properties

B. Bernabe<sup>a,\*</sup>, S. Lasbleiz<sup>b</sup>, R. Gerber<sup>c</sup>, J. Cappelleri<sup>c</sup>, A. Yelnik<sup>d</sup>, P. Orce<sup>l</sup><sup>b</sup>, T. Bardin<sup>b</sup>, J. Beaudreuil<sup>b,\*</sup>

<sup>a</sup> Service de rhumatologie, service de médecine physique et de réadaptation, groupe hospitalo-universitaire Saint-Louis, Lariboisière, Fernand-Widal, 2, rue Ambroise-Paré, 75010 Paris, France

<sup>b</sup> Service de rhumatologie, groupe hospitalo-universitaire Saint-Louis, Lariboisière, Fernand-Widal, Paris, France

<sup>c</sup> Pfizer, New London, UK

<sup>d</sup> Service de médecine physique et de réadaptation, groupe hospitalo-universitaire Saint-Louis, Lariboisière, Fernand-Widal, Paris, France

\*Corresponding authors.

E-mail address: [brigitte.bernabe@lrh.aphp.fr](mailto:brigitte.bernabe@lrh.aphp.fr).

**Keywords:** URAM scale; Disability; Dupuytren's disease

**Aim.**— The Unité rhumatologique des affections de la main (URAM) scale is the first and unique patient-reported functional outcomes measure developed and validated for Dupuytren's disease. Our aim is to test comparatively its content validity and its ease of implementation.

**Method.**— We conducted a study in patients affected by Dupuytren's disease with the Tubiana score grading the structural severity, the self-assessed disability on a visual analogue scale (VAS) (content validity) and the time of response (ease of implementation) as outcome criteria. We applied the URAM scale and compared its properties with those of the Cochin Hand Function Scale (CHFS) and the Disabilities of the Arm, Shoulder and Hand (DASH) questionnaire. Spearman's correlation was used for the content validity study. For the time response assessment, order of questionnaires application was randomly assigned for each patient. The time to file out each questionnaire was recorded in seconds for each patient.

**Results.**— A total of 83 patients with Dupuytren's disease, was prospectively included. Fifty-three patients were involved in the comparative content validity study and 30 in the time response assessment. The URAM scale showed a high convergence with the Tubiana scale ( $r = 0.61$ ) and with the self-assessed disability on a VAS (0.67). For the CHFS, the convergence was moderate with the Tubiana scale (0.39) and high with the self-assessed disability (0.56). For the DASH questionnaire, there was no convergence with the Tubiana scale (0.22) and the convergence with the self-assessed disability was moderate (0.46). Convergence with the Tubiana and with the self-assessed disability appeared higher for the URAM scale than for the CHFS or for the DASH questionnaire. The time of response was shorter for the URAM scale ( $42 \pm 20$ ) than for the CHFS ( $71 \pm 35$ ) and for the DASH questionnaire ( $103 \pm 59$ ,  $P < 0.0001$ ).

**Discussion.**— The results reinforce the psychometric properties of the URAM scale in Dupuytren's disease. Furthermore, the time of response for assessing disability with the URAM scale was shorter than with the CHFS and the DASH questionnaire. The URAM scale should be therefore largely recommended in clinical practice and in clinical studies for assessing disability of patients with Dupuytren's disease.

<http://dx.doi.org/10.1016/j.rehab.2012.07.163>

CO14-007-e

### Karasek's classification and chronic pain patients: Characteristics of the "high strain" patients

B. Fouquet<sup>a,\*</sup>, F. Doury-Panchout<sup>a</sup>, J.-C. Métivier<sup>b</sup>, M. De Laforest<sup>b</sup>

<sup>a</sup> Service de médecine physique et de réadaptation, hôpital Trouseau, CHU de Tours, route de Loches, 37044 Tours cedex, France

<sup>b</sup> Service de médecine physique et de réadaptation, CHIC Chateau-Renault, France

\*Corresponding author.

E-mail address: [fouquet@med.univ-tours.fr](mailto:fouquet@med.univ-tours.fr).

**Keywords:** Karasek; Work stress; Pain; Return to work process; Musculoskeletal disorders

**Objective.**— Many models of the stress in the work place have been described. The most used model is the Karasek. The main objective of this study was to evaluate the personal and environmental characteristics of patients undergoing a multidisciplinary program of rehabilitation in function of the presence of a strain work.

**Methods.**— A cohort of 935 chronic musculoskeletal patients (mean age: 32.8 + 9.8 years; mean work disability duration: 12.9 + 12.6 months) has been evaluated by the Karasek's classification. Accordingly to the scores of the job decision latitude and the psychological job demands, the patients were classified in four groups: « passive », « low strain », « active », « high strain ». The « high strain » group was characterized by the lowest score in the decision latitude and the highest scores in the psychological demands. This group was compared to the three others for the affective and cognitive dimensions of the pain and for the needs for the return to work process.

**Results.**— The high strain group (11.8% of the patients) had significantly higher scores for the anxious and depression tests, for the different dimensions of the Nottingham Perceptual Health Profile, for the life events, for catastrophizing and work fear avoidance beliefs than low strain patients (43.7% of the patients).

The social support was significantly poorer than in the three others groups. The score of the job satisfaction scale was the lowest. The need for a modification in the work environment was significantly more frequent in this group compared to the low strain group (52.9% vs 25.7%).

**Conclusions.**— The return to work process in chronic musculoskeletal disorders is complex. By the Karasek's classification we have found that « high strain » patients (high level of stress at the work place) have high levels of psychological distress in association with work fear avoidance beliefs. They need more changes in the work place. This study emphasises the heterogeneity of chronic musculoskeletal pain patients and the need for a complete evaluation of the health status before rehabilitation.

<http://dx.doi.org/10.1016/j.rehab.2012.07.164>